



**North Baja Pipeline, LLC**

**NORTH BAJA PIPELINE EXPANSION PROJECT**

**Appendix H-2**  
**Traffic Management Plan for**  
**Imperial County Roads**

Prepared by



2087 E. 71st St.  
Tulsa, OK 74136

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## **Appendix H-2**

### **Traffic Management Plan for Imperial County Roads**

#### **1.0 INTRODUCTION**

North Baja Pipeline, LLC (North Baja), will construct the North Baja Pipeline Expansion Project (Project), a new natural gas pipeline from the U.S.-Mexico border to the existing North Baja facilities and the El Paso Natural Gas System in Ehrenberg, Arizona. The Project includes three elements: the B-Line, which includes interconnection facilities in Ehrenberg, Arizona, as well as a 79.8-mile, 42- and 48-inch-diameter pipeline between Blythe and the Mexican border; the Arrowhead Extension, which includes a meter station and a 2.1-mile, 36-inch-diameter pipeline extending from the proposed B-Line at milepost (MP) 7.4 to Southern California Gas Company's existing Blythe Compressor Station; and the Imperial Irrigation District (IID) Lateral, a 45.7-mile, 16-inch-diameter pipeline between North Baja's mainline and the IID El Centro Generating Station. The Project will be constructed in phases, with the first phase planned for construction in 2007, the IID Lateral for 2008, and the final phase of the Project in 2009, pending completion of upstream liquefied natural gas (LNG) terminal facilities.

## **2.0 ROUTE DESCRIPTION – IID LATERAL PIPELINE**

The 16-inch Imperial Irrigation District (IID) Lateral Pipeline extends from the Ogilby area of southeastern California, west of Yuma, Arizona, westward to El Centro, California. The IID Lateral will be installed 1 foot outside the roadway along the Evan Hewes Highway from MP 8.5 to MP 27.1 where it then enters the El Centro Valley. In the Valley, the lateral line will generally be installed in streets from MP 27.7 to the terminus of the line at MP 45.7. While the only residential area in the first 27 miles is located at MP 8.9, residences and some businesses are located sporadically as the pipeline passes through the Valley.

### 3.0 TRAFFIC MANAGEMENT APPROACH

North Baja will consult with the Imperial County Public Works. It is likely that Imperial County will require that construction measures comply with California Department of Transportation (CalTrans) Traffic Manual. North Baja's plan requires that the contractor comply with all relevant elements of the CalTrans Traffic Manual, Chapter 5, Traffic Controls. Key traffic control elements in the manual address:

- Temporary traffic control;
- Pedestrian, bicycle, and worker considerations;
- Hand signaling control;
- Types of traffic control devices; and
- Types of temporary traffic control zone activities.

Section 3.1 describes the construction considerations along the pipeline route. Section 3.2 addresses the traffic management approach. Attachment A shows typical traffic control measures contained in CalTrans Traffic Manual that will be implemented by the contractor.

North Baja will submit detailed construction drawings for approval by Imperial County Public Works Department as part of obtaining an Encroachment Permit.

#### 3.1 IID LATERAL CONSTRUCTION CONSIDERATIONS

The following summarizes the construction considerations for the IID Lateral Line:

**Location in Relation to Imperial County Roads and Streets** – Construction adjacent to and in areas of Imperial County roads and streets will be accomplished using urban construction techniques. To minimize disruption to residences and facilitate construction across roadways, canals and drains, North Baja will locate the pipe 1 foot outside the edge of pavement along Evan Hewes Highway and in the edge of the pavement in the valley. North Baja proposes to confine the construction work area to the permanent easement now occupied by Imperial County roads and streets with additional extra work space located along the road at major crossings such as cross streets, railroads, canals, and ditches. Certain crossings such as the operating canals, state highways, interstate highways, and many of the county roads and streets will be installed by conventional boring. All other crossings are proposed to be open cut aside from the drains whose substantial depth allows for the pipeline to be installed across the top.

**Preconstruction Planning** - Before construction in Imperial County, North Baja will obtain an encroachment permit from the Imperial Public Works Department. Design and construction methods will conform to Imperial County requirements. Preconstruction activities will include preliminary examination of the work areas and identification of the exact location of subsurface

utilities, either through visual inspection or by digging potholes at intervals along the pipeline trench. If potholing identifies a conflict between existing utilities and the pipeline centerline, then the pipeline or utility will be horizontally and/or vertically realigned to eliminate the conflict.

North Baja will contact each owner and/or tenant of the properties abutting the road to explain the construction process and identify any special conditions or concerns that need to be incorporated into the construction plans. In addition, these adjacent residents and businesses will be notified by hand-distributed flyers 2 weeks before construction.

**Timing** – To minimize the duration of inconvenience to residences, North Baja proposes to close off one half to 1 mile-long sections of road and reroute traffic around these areas (while maintaining access for residents). No more than 2 miles of work area will be active at any one time and construction will advance along the road at an estimated 0.5 mile per day. Excluding any repaving which may be required, direct construction impacts at any given location are estimated to last no more than 2 to 3 weeks.

**Construction Crews** – The construction crew will be a self-sufficient spread and will have two major components. The first component being the personnel and equipment associated with the installation of the major crossings and the second component will be responsible for the installation of the pipeline sections in between the crossings. Both components of this pipeline spread will make every effort to keep unavoidable road closures or restricted access to a minimum and coordinate those closures with the impacted residences and businesses.

**Safety Considerations and Access** – Although Imperial County roadways are not a heavily traveled roadway, there are 34 residences and 5 businesses along the proposed route. North Baja will apply specific traffic management measures in cooperation with the Imperial County Department of Public Works. These include:

- The pipeline will be installed with a minimum of 36 inches of cover and with a minimum of 12 inches of separation from other utilities or obstructions. Clearance over and under drains and canals will be as agreed with Imperial Irrigation District.
- Intersections will be bored or trenched and steel plated if construction doesn't occur on consecutive days.
- Adjacent residents and businesses will be notified by hand-distributed flyers 2 weeks before construction. The flyers will include the dates of construction, the work hours, traffic detours, and contact numbers for North Baja and the contractor. Emergency response agencies will also be notified of the work schedule.
- The Underground Service Alert will be notified at least 48 hours before beginning work.
- Flagging personnel will be provided to route traffic around construction equipment and obstructions.
- Work will be scheduled during daylight hours unless alternative schedules are authorized.

- Access will be maintained to all residences or businesses except during actual trenching operations. Steel plates will be available to maintain access to driveways during periods when the trench is open.
- Non-local traffic will be detoured around construction activities.
- One lane of restricted traffic movement will be maintained through the construction area as it progresses down roadways. This will allow residences and businesses reasonable access during the construction activities.
- Where unrestricted traffic is impractical, North Baja proposes that its contractor will maintain at least one direction, either east or west, for exit of local traffic and access for any emergency traffic that may occur.
- At non-work times the work area will be secured and patrolled to minimize safety hazards associated with open trenches, heavy equipment, and other construction operations.
- Open trenches will be covered or cordoned off during non-working hours. The length of open trench may vary with individual circumstances and interferences that may occur along the corridor.

**Trenching and Boring** – The trench depth for the portions of the pipeline between the bored crossings is expected to be 6 to 7 feet to accommodate the 16-inch pipe and maintain 36-inch of cover in accordance with USDOT Pipeline Safety Regulations. Trench depth will also be contingent on the type of soils and the quantity of ground water encountered. Spoil material from the trench will be stockpiled and spread on the work side of the right-of-way or hauled to an approved stockpile location. Because the pipeline installation is in the road corridor, no topsoil segregation is planned. Any pavement or rock materials removed during the installation of the pipeline will be hauled away to an approved landfill or other suitable location. Sheet piling and dewatering techniques such as well-pointing will be utilized, as needed, in order to ensure a safe and stable trench and bore entrance or exit holes. Pipeline trench borehole dewatering will be kept to a minimum, as is practical. North Baja will dewater to nearby canals and drains in accordance with Regional Water Quality Control Board water quality standards.

**Pipe Installation** – Pipe installation into the trench will be performed in sections as long as practical, with the pipe sections being welded up alongside the ditch. In tight work areas, the contractor may elect to “double joint” pipe lengths into 80 to 120-foot sections at an offsite location and transport the pipe joints to the area. In addition, longer sections may be welded up at staging areas located nearby for use in very narrow workspace zones.

As the pipe installation progresses, tie-ins will be performed in the ditch at convenient locations to facilitate welding. Most tie-ins will occur on either side of crossings and at sites where installation methodology changes from one approach to another, *i.e.*, stovepipe to traditional pipe-lay. At these locations the ditch will be widened sufficiently to allow welders access and afford them the space necessary to complete the welds.

**Backfilling and Testing** – Following pipe installation and the coating of the welds, the ditch will be backfilled with the spoil material removed that meets North Baja’s pipeline padding specifications, and compacted to the requirements of the Imperial County Public Works

Department. New pavement will be installed where existing pavement is removed for ditching, and the area will be opened back to normal traffic. However, during hydrostatic testing the area again will be limited to traffic of necessity as a safety precaution. North Baja proposes to test the pipeline during a time of least disruption to the local residences and businesses. A minimum 8-hour hydrostatic test period is required by North Baja.

**Noise and Dust** – Noise will be reduced by maintaining equipment in good operating condition, equipped with proper noise control accessories including mufflers and or sound attenuation enclosures. Noise will be monitored for equipment that may run for extended periods of time such as pumps, compressors, and generators. Work will be scheduled during daylight hours unless alternative schedules are authorized. Dust will be suppressed by the use of water trucks and regular spraying.

**Restoration** – Following a successful test, the entire area will be cleaned up and restored to its original condition. Residential areas disturbed during construction will have all fencing, lawns, and plant materials replaced to a standard equal to the preconstruction conditions. Pavement removed or damaged during construction will be replaced initially with temporary material, and later re-paved, during restoration, to the requirements of the Imperial County Public Works Department.

## 3.2 TRAFFIC MANAGEMENT APPROACH

To effectively outline the traffic management issues associated with the pipe installation in the Imperial County roads and streets, the plan has been broken into segments. The plan is subject to revision as the design of the pipeline is finalized and input is received from Imperial County and the pipeline contractor. The segments are as follows:

Segment 1 – MP 8.5 to MP 27.1

Segment 2 – MP 27.7 to MP 38.7

Segment 3 – MP 38.7 to MP 38.9

Segment 4 – MP 39.7 to MP 41.4

Segment 5 – MP 41.4 to MP 42.9

Segment 6 – MP 42.9 to MP 43.4

Segment 7 – MP 44.7 to MP 45.7

### **Segment 1 – MP 8.5 to MP 27.1 (Evan Hewes Highway)**

For Segment 1, construction equipment and personnel will utilize the eastbound lane of Evan Hewes Highway for pipe installation 1 foot outside the edge of pavement, from MP 8.8 to MP



13.7 and from MP 26.0 to MP 27.1. For this portion of Segment 1, the westbound lane will serve as access for emergency vehicles and local residents only. From MP 16.0 to MP 26.0, the westbound lane will be utilized for pipe installation 1 foot outside the edge of pavement and the eastbound lane will serve as access for emergency vehicles and local residents only. One lane traffic control along Segment 1 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking and signs, or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums, and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

At approximately MP 8.8, is the proposed open cut crossing of Evan Hewes Highway where the pipeline passes from the north side of Evan Hewes Highway to the south side. While the roadway is being open cut for the installation of the pipeline, a steel plate will be used to bridge the pipe ditch because there are no adjacent roads to divert traffic.

Near MP 13.1, the pipeline will cross Brock Research Center Road which is essentially an exit from Interstate 8 with an overpass but no roadway to the north. Because of its proximity to the interstate, North Baja is proposing to bore Brock Research Center Road resulting in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation. Should these days not be consecutive adequate traffic control devices will be provided around the bore pits to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Evan Hewes Highway.

Near MP 13.7 is the open cut crossing of Evan Hewes Highway where the pipeline crosses back to the north side of the highway. While the roadway is being open cut for the installation of the pipeline, a steel plate will be used to bridge the pipe ditch as there are no adjacent roads to divert traffic.

Near MP 26.0 is the open cut crossing of Evan Hewes Highway where the pipeline crosses back to the south side of the highway. While the roadway is being open cut for the installation of the pipeline, a steel plate will be used to bridge the pipe ditch because there are no adjacent roads to divert traffic.

These temporary traffic control zones will be carefully monitored under varying conditions of traffic volume, light, and weather to ensure that traffic control measures are operating effectively and that all devices are clearly visible, clean and in good repair. However, it is expected that traffic will be sparse as construction is proposed for the summer months when there is significantly less traffic in the area.

**Segment 2 – MP 27.7 to MP 38.7 (Hunt Road)**

For Segment 2, the westbound lane of Hunt Road will be used for pipe installation from MP 27.6 to M.P 33.9, MP 34.5 to MP 34.9, and from MP 35.9 to MP 38.7. For these three portions of Segment 2, the eastbound lane will serve as access for emergency vehicles and local residents only. From MP 34.9 to MP 35.9, the eastbound lane of Hunt Road will be used for pipe installation and the westbound lane will serve as access for emergency vehicles and local residents only. One-lane traffic control along Segment 2 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking and signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

Near MP 28.5, the pipeline will cross Vanderlinden Road, a proposed open-cut crossing. While the roadway is being open-cut, northbound traffic will be detoured 1 mile west on Chell Road to Miller Road and southbound traffic will be detoured 3 miles west on Interstate 8 to Bonds Corner Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Vanderlinden Road.

The next crossing in this segment is Miller Road located near MP 29.5. Miller Road is also designated as County Highway S33 and is a proposed bored crossing resulting in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation. Should these days not be consecutive adequate traffic control devices will be provided around the bore pits to permit safe traffic flow.

Near MP 30.5, the pipeline will cross Enz Road, a proposed open-cut crossing. While the roadway is being open-cut, both north and southbound traffic will be detoured 1 mile east on Chell Road to Miller Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Enz Road.

The next crossing in this segment is Bonds Corner Road located near MP 31.5. Bonds Corner Road is a proposed bored crossing resulting in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation. Should these days not be consecutive adequate traffic control devices will be provided around the bore pits to permit safe traffic flow.

Near MP 32.0, the pipeline will cross Schali Road, a proposed open cut crossing. The roadway north of the crossing dead-ends at the south right-of-way fence of Interstate 8 Highway and has no residences or businesses and is used primarily by farm equipment to access the adjoining fields; therefore, it will not be necessary to detour traffic. However, steel plating will be used to bridge the pipe ditch during the installation of this road crossing for emergency vehicles and farm equipment. While the roadway is being open cut, northbound traffic south of the road crossing will be diverted 1 mile east on Connelly Road to Bonds Corner Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Schali Road.

Near MP 33.2, the pipeline will cross Towland Road, a proposed open cut crossing. While the roadway is being open cut, southbound traffic will be detoured 1 mile west on Edwards Road to Holtville Orchard Road while northbound traffic will be diverted 1 mile west on E. McCabe Road to Holtville Orchard Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Towland Road.

The next crossing in this segment is State Route 7 located near MP 34.2. State Route 7 is also known as Holtville Orchard Road (formerly County Highway S32) and is a proposed bored crossing resulting in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation. Should these days not be consecutive adequate traffic control devices will be provided around the bore pits to permit safe traffic flow.

Near MP 34.9, the pipeline will cross Mets Road, a proposed open cut crossing. While the roadway is being open cut, southbound traffic will be detoured 1 mile east on Ross Road to Anderholt Road and northbound traffic will be diverted 1 mile west to Anderholt Road on Hilfiker Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two

days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Mets Road.

Near MP 35.9, the pipeline will cross Anderholt Road, a proposed open-cut crossing. While the roadway is being open-cut, southbound traffic will be detoured 1 mile east on Ross Road to Mets Road and northbound traffic will be diverted 1 mile east to Mets Road on Hilfiker Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Anderholt Road.

Near MP 36.9, the pipeline will cross Barbara Worth Road, a proposed open-cut crossing. While the roadway is being open-cut, southbound traffic will be detoured 1 mile east on Ross Road to Anderholt Road while northbound traffic will be diverted 1 mile east to Anderholt Road on Hilfiker Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Barbara Worth Road.

Near MP 37.9, the pipeline will cross Meloland Road, a proposed open-cut crossing. While the roadway is being open-cut, southbound traffic will be detoured 1.5 miles west on E. Ross Road to Bowker Road while northbound traffic will be diverted 1 mile west to Bowker Road on McCabe Road. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Meloland Road.

These temporary traffic control zones will be carefully monitored under varying conditions of traffic volume, light and weather to ensure that traffic control measures are operating effectively and that all devices are clearly visible, clean and in good repair.

### **Segment 3 – MP 38.7 to MP 38.9 (McGrew Road and Interstate 8)**

McGrew Road is a private road which is used primarily for farm equipment to access the adjoining fields. However, for Segment 3, construction equipment and personnel will utilize the northbound lane of McGrew Road for pipe installation. For all of Segment 3, the southbound lane will serve as access for emergency vehicles and farm equipment. One lane traffic control

along Segment 3 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking, signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers. Modification of these traffic control measures or working conditions may be required to expedite traffic movement and to promote worker safety.

At approximately MP 39.1 is the proposed bored crossing of Interstate 8 resulting in minimal impact to traffic. The estimated duration of the bored crossing is four days, one day for bore pit excavation and three days for pipe installation.

#### **Segment 4 – MP 39.7 to MP 41.4 (E. Ross Road)**

For Segment 4, the eastbound lane of E. Ross Road will be used for pipe installation from MP 39.7 to MP 40.4 where the westbound lane will serve as access for emergency vehicles and local residents only. At MP 40.4 the pipeline crosses Bowker Road, while at the same location, E. Ross Road deviates slightly to the south. This facilitates the bored crossing of both roads with the same bore.

The Bowker Road/E. Ross Road combination crossing is a proposed bored crossing resulting in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation. Should these days not be consecutive, adequate traffic control devices will be provided around the bore pits to permit safe traffic flow.

At MP 40.4, after the Bowker/E. Ross Roads crossing, the westbound lane of E. Ross Road will be used for pipe installation and the eastbound lane will serve as access for emergency vehicles and local residents only.

One-lane traffic control along Segment 4 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking and signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

**Segment 5 – MP 41.4 to MP 42.9 (Parker Road)**

For Segment 5, construction equipment and personnel will utilize the northbound lane of Parker Road for pipe installation from MP 41.4 to MP 42.2. For this part of Segment 7, the southbound lane will serve as access for emergency vehicles and local residents only. After the pipeline crosses East Gillett Street, the pipe will be installed in the west edge of the southbound lane of Parker Road from MP 42.2 to MP 42.8 and will utilize the southbound lane of Parker Road for pipe installation. For this part of Segment 7 the northbound lane will serve as access for emergency vehicles and local residents only. One-lane traffic control along Segment 5 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include, proper pavement marking, signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers. Modification of these traffic control measures or working conditions may be required to expedite traffic movement and to promote worker safety.

Pertinent to this segment is the open-cut crossing of East Hamilton Avenue at MP 41.7. East Hamilton Avenue is a gravel road which dead-ends into State Route 111 and has no residences or businesses; therefore, it will not be necessary to detour traffic. However, steel plating will be used to bridge the pipe ditch during the installation of this road crossing. Further along this segment near MP 42.2 is the open-cut crossing of East Gillett, a gravel road, which also has no residences or businesses; therefore, it will not be necessary to detour traffic. Steel plating will be used to bridge the pipe ditch during the installation of this road crossing.

At the end of this segment, near MP 42.9, is the proposed road bore of Evan Hewes Highway. This crossing technique results in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is three days, one day for bore pit excavation and two days for pipe installation. Should these days not be consecutive adequate traffic control devices will be provided around the bore pits to permit safe traffic flow.

**Segment 6 – MP 42.9 to MP 43.4 (Holton Road and State Route 111)**

For Segment 6, the eastbound lane of Holton Road will be used for pipe installation. For all of Segment 6, the westbound lane will serve as access for emergency vehicles and local residents only. One-lane traffic control along Segment 6 will be accomplished by the use of adequate warning, delineation and channelization techniques. However, there is virtually no traffic on most of this segment of Holton Road as the road dead-ends into State Route 111 and a large vacant lot and an automobile junk yard constitute over 90 percent of the adjacent land use. Such techniques include proper pavement marking and signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include

but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

At approximately MP 43.4 is the proposed bored crossing of State Route 111, resulting in minimal impact to traffic. The estimated duration of the bored crossing is four days, one day for bore pit excavation and three days for pipe installation.

### **Segment 7 – MP 44.7 to MP 45.7 (E. Villa Road)**

For Segment 7, the eastbound lane of E. Villa Road will be used for pipe installation. For all of Segment 7, the westbound lane will serve as access for emergency vehicles and local residents only. One-lane traffic control along Segment 7 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking and signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

Near MP 44.7 is the proposed opencut crossing of Cooley Road, a lightly traveled gravel road. While the roadway is being opencut, southbound traffic will be diverted 1 mile to the east on Cruickshank Road to old State Route 111 and northbound traffic will be diverted 1 mile east on Evan Hewes Highway to old State Route 111. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Cooley Road.

The final road crossing for this lateral is located near MP 45.6. The named road is Dogwood Road, designated as County Highway S31, and is a proposed bored crossing, which will result in minimal impact to traffic. The boring of this road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. The estimated duration of the bored crossing is two days, one day for bore pit excavation and one day for pipe installation.

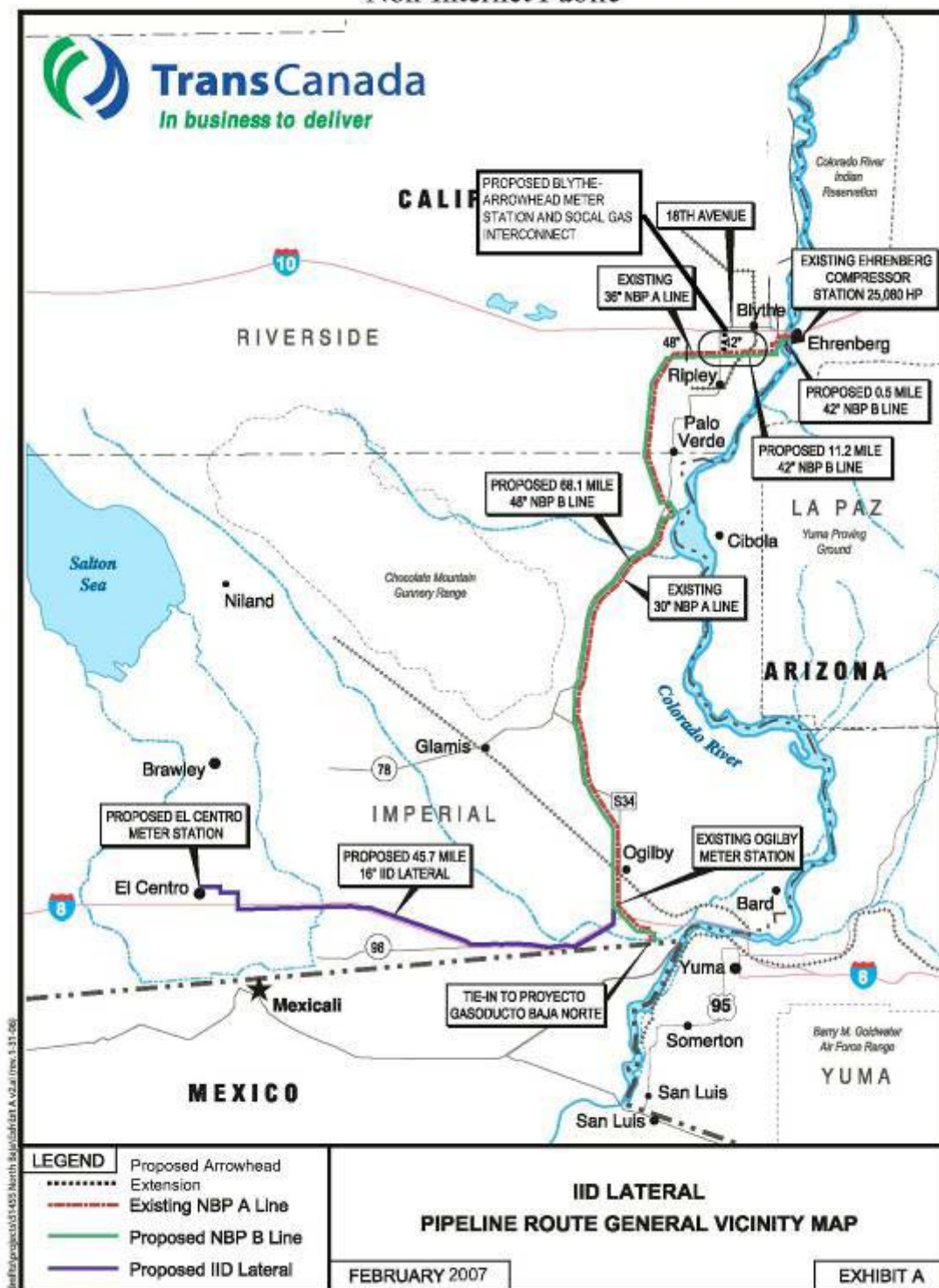
## **EXHIBITS**



**EXHIBIT A**

**IID LATERAL PIPELINE ROUTE GENERAL VICINITY MAP**

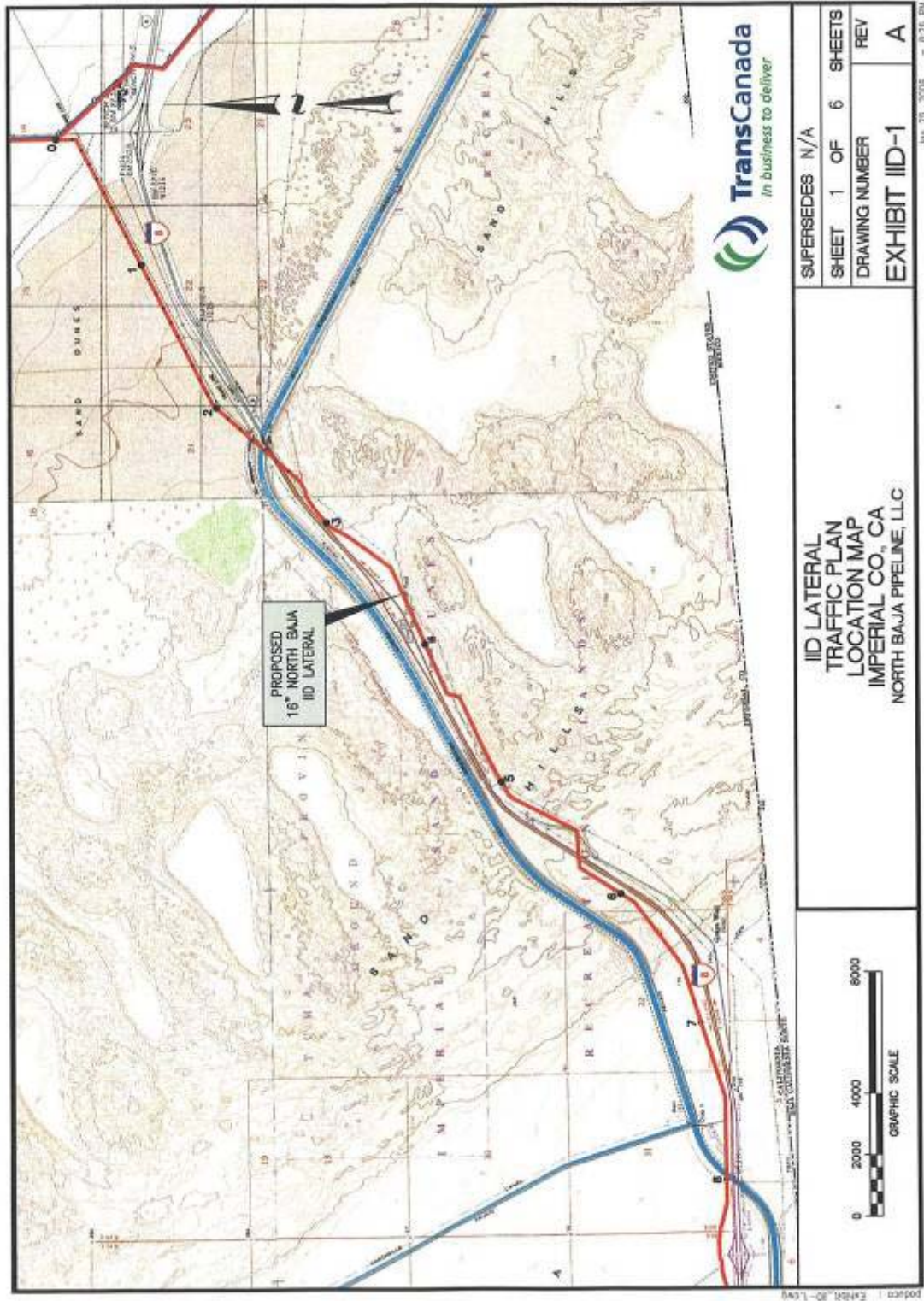
Non-Internet Public



**EXHIBIT B**

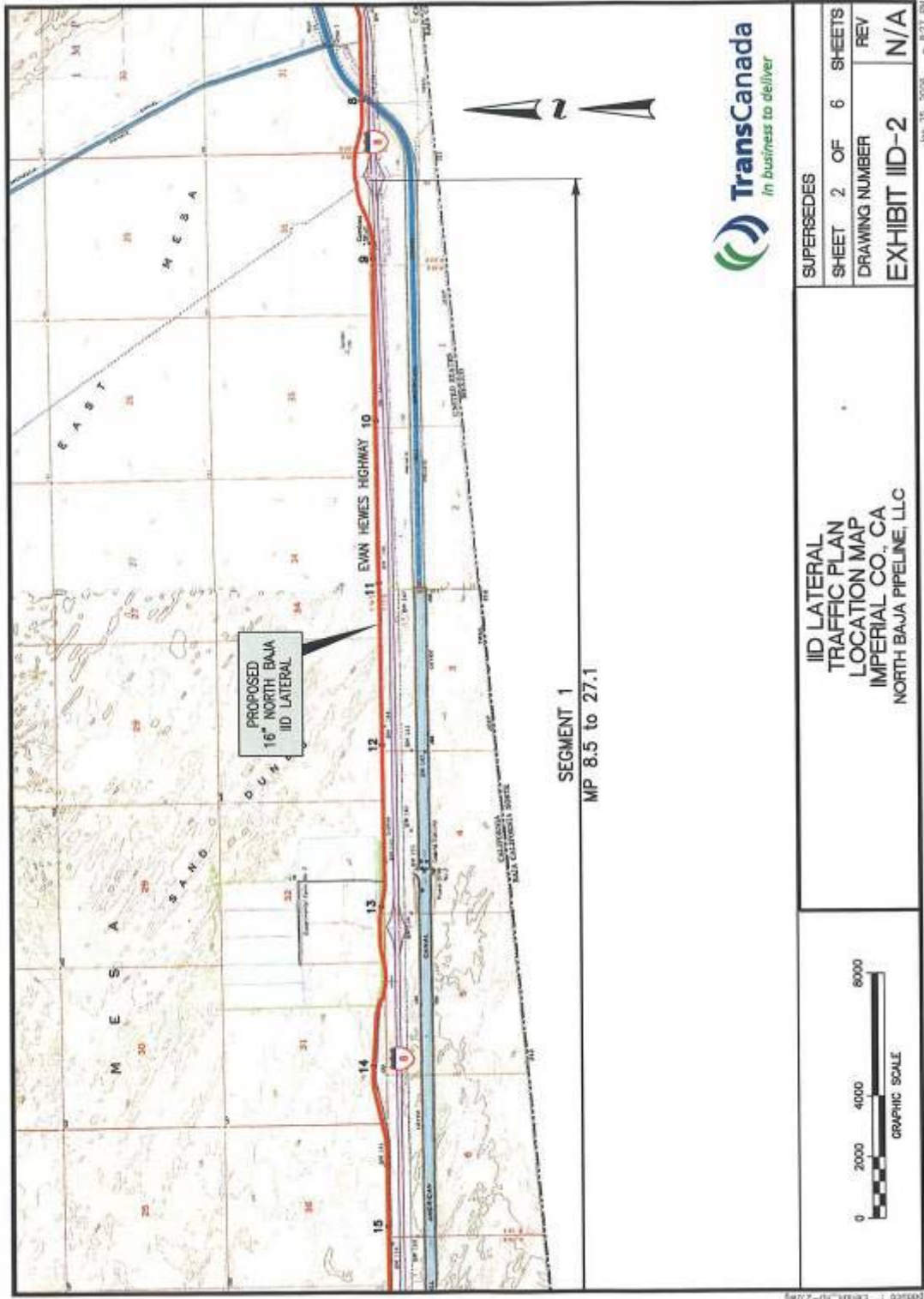
**IID LATERAL CONSTRUCTION PLAN VICINITY MAP**

Non-Internet Public

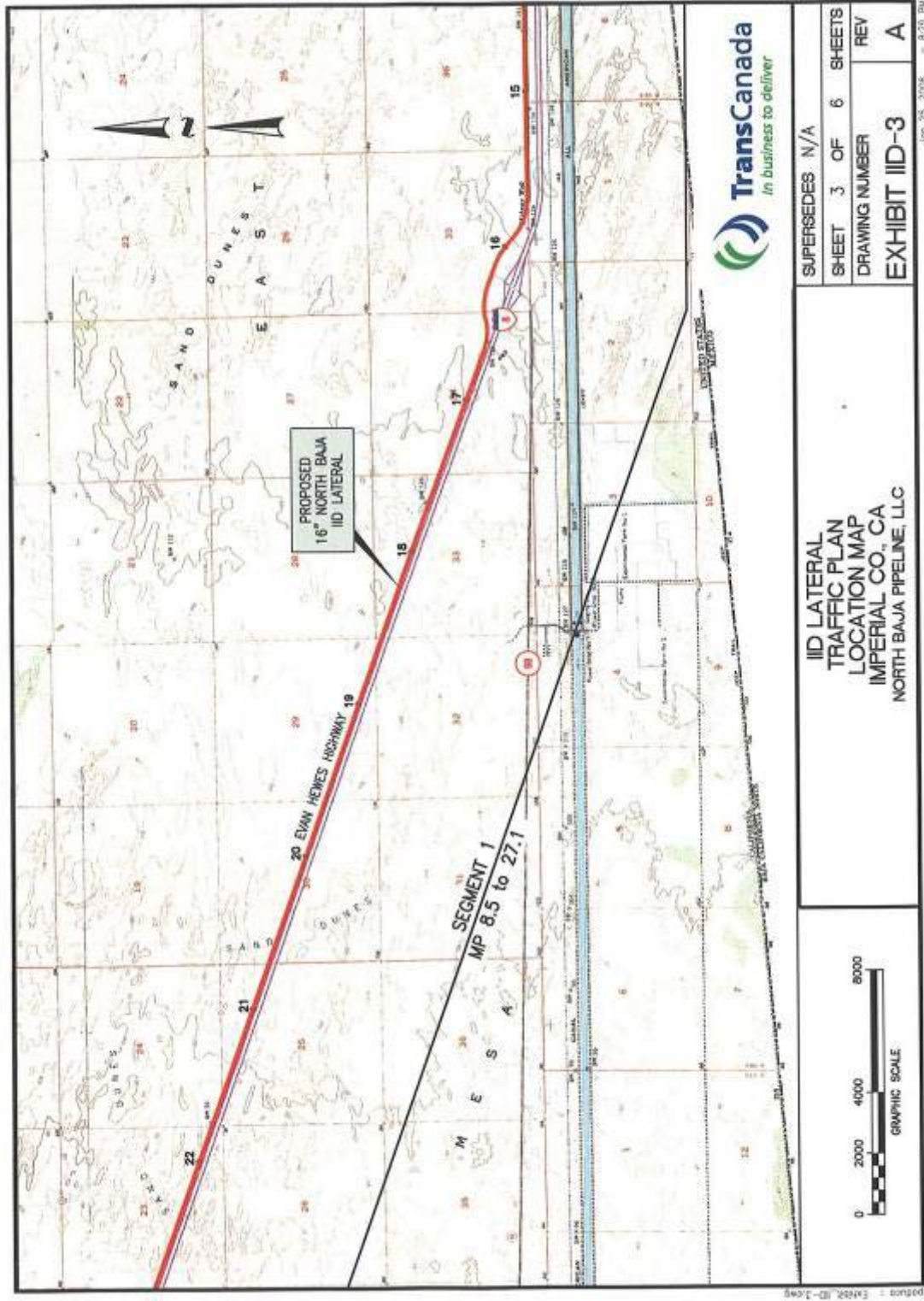




Non-Internet Public

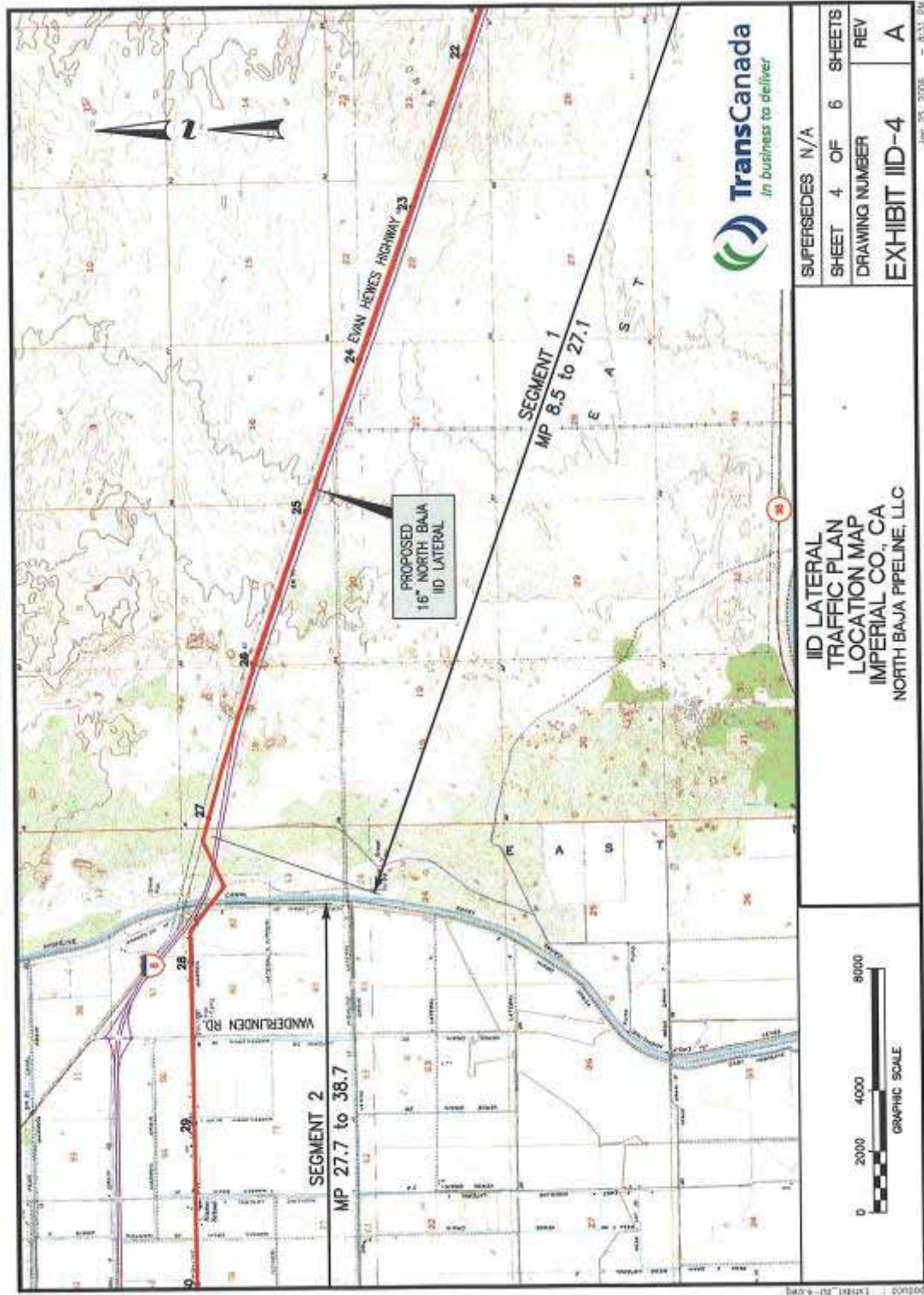


Non-Internet Public

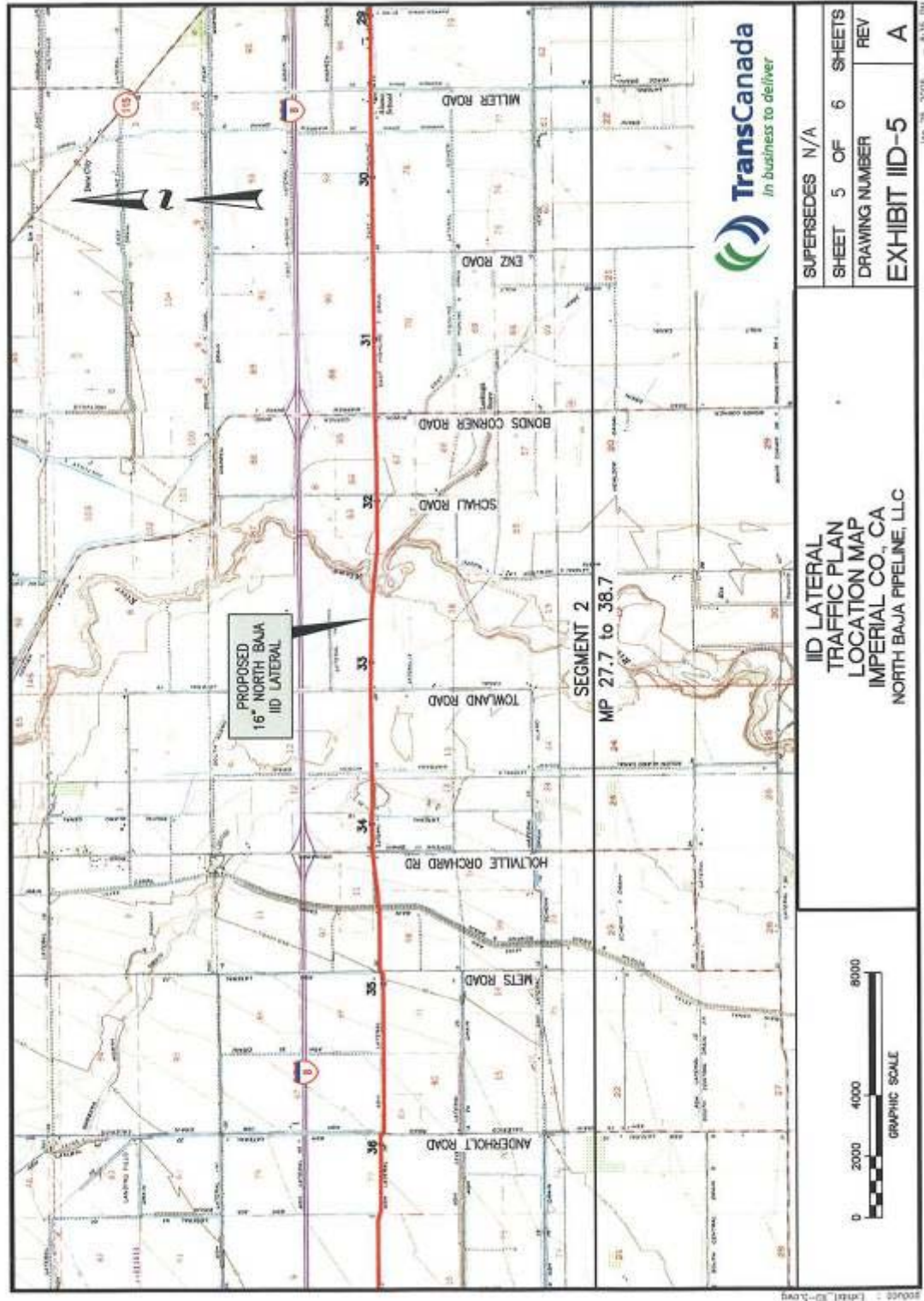




Non-Internet Public

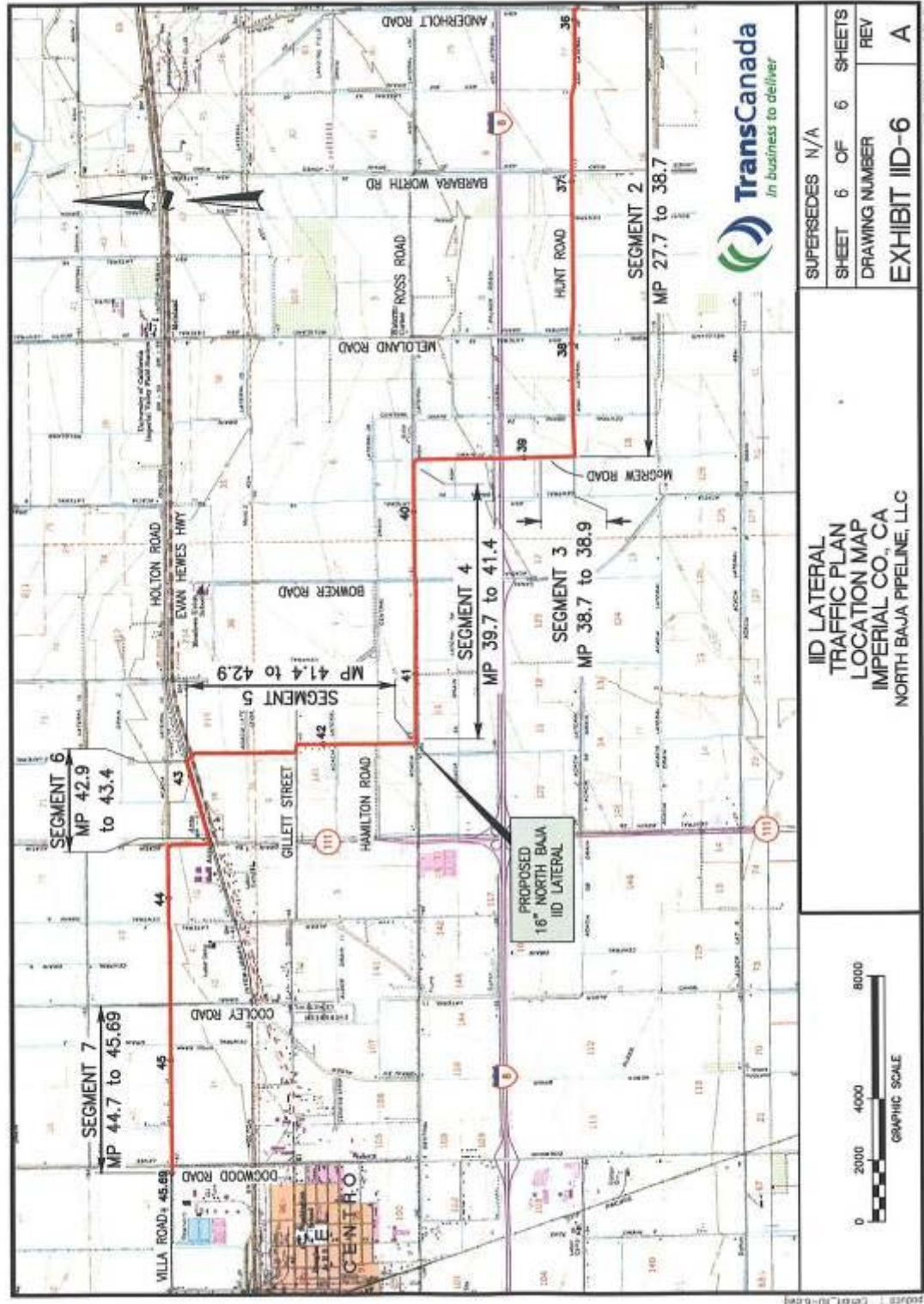


Non-Internet Public





Non-Internet Public



**ATTACHMENT A**  
**TYPICAL TRAFFIC CONTROL MEASURES**